

REMARKS

Claims 1 – 30 are pending and these same claims have been rejected. Claims 1 – 30 are rejected for allegedly failing to produce a physical transformation or a useful, concrete, and tangible result. Applicants respectfully traverse this rejection. Claims 1 – 30 stand rejected under 35 U.S.C. § 103 as allegedly being obvious over U.S. Patent 6,317,754 (Peng) in view of The WinFS file system for Windows Longhorn: Faster and Smarter by Oliver Lbelshauser (Oliver). Applicants respectfully traverse these rejections. Applicants herein amend claims 1, 3, 9, 13, 16, 24 and 28. No new matter is added.

Claim Rejections – 35 U.S.C. § 101

In an Office Action dated November 16, 2006 the Examiner stated that claims 1 – 30 failed to product a useful, concrete, and tangible real world result. Applicants submit that claims 1 – 30 produce a useful, concrete and tangible result. For example, claim 1 recites “performing a synchronization operation to synchronize the data stored in the multiple instances of said storage platform.” According to the MPEP, “the claimed invention as a whole must accomplish a practical application. That is, it must produce a useful, concrete and tangible result.” *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368, 1373 (Fed. Cir. 1998). In *State Street*, the court held that transformation of data constitutes a practical application of an algorithm because the result, i.e., the final share price was useful, concrete, and tangible. *See, e.g., State St.*, 149 F.3d at 1374. Similarly in claim 1 the storage platform utilizes one or more algorithms to produce a result, i.e., the synchronized data is useful, concrete, and tangible. Applicants submit that since synchronized data stored in multiple instances of a storage platform is a useful, concrete, and tangible the rejection is overcome.

Claim Rejections 35 U.S.C. § 103(a)

Claims 1 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peng in view of Oliver.

Claim 1 recites in part:

A storage platform system for a hardware/software interface system implemented at least in part by a computing device, said storage system comprising:

multiple instances of a storage platform each instance storing data, the data divided into programmably defined change units;

a synchronization subsystem native to the hardware/software interface system that enables the system to perform a synchronization operation to synchronize the data stored in the multiple instances of said storage platform based on changes that are sequentially enumerated and tracked on a per change unit basis.

In an obviousness rejection the combination of art must teach or suggest all the claim limitations. Applicants submit that the combination of Peng and Oliver fails to teach or suggest claim 1 as recited. For example, claim 1 recites “multiple instances of a storage platform each instance storing data, the data divided into *programmably defined change units* [and synchronizing] the multiple instances of said storage platform based on changes that are sequentially enumerated and tracked on a per change unit basis.” As stated in the application, “defining change units requires finding the right trade-offs. For that reason, the synchronization service *allows schema designers to participate in the process*.” (Application at paragraph [0445])(emphasis added). More specifically, by giving programmers the option to programmably define the size of a change unit the storage platform of claim 1 permits developers to flexibly define what portions of the database will be tracked by the system. For example, “[i]n one embodiment, the synchronization service does not support Change Units that are larger than an element. However, it does support the ability for schema designers to specify smaller Change Units than an element - - - namely, grouping multiple attributes of an

element into a separate Change Unit.” (Application at paragraph [0446]) and these “[c]hanges are tracked at the level of change unit granularity defined in the schema” (Application at paragraph [0555]). This flexibility permits designers to create change units of various scope within the same storage platform. Applicants submit that Peng fails to teach the above mentioned portion of claim 1 and respectfully requests reconsideration of the rejection to claim 1.

Insomuch as claims 2 – 8 depend directly or indirectly from claim 1 they also patentably define over the combination of Peng and Oliver. Accordingly, Applicants respectfully request reconsideration of the rejections.

Independent claims 9, 16, and 24 recite similar elements to that of claim 1 and patentably define over the combination of Peng and Oliver for at least the reason described above with respect to claim 1. Insomuch as claims 10 -12, 17 – 23, 24 – 27 depend directly or indirectly from independent claims 9, 16, and 24 they too patentably define over the combination. Accordingly, Applicants respectfully request reconsideration of the rejections.

Independent claim 13 recites in part:

said replica sending to said adapter an updated state information for said replica that, based on a last state information for said data source, reflects new changes that have been made since the last synchronization as reflected in said last state information for said data source; and

said adapter, receiving said updated state information for said replica and said new changes, applying a conflict resolution policy selected from a plurality of conflict resolution policies, implementing as many changes to the data source as possible with respect to the specified conflict resolution policy and tracking success or failure for each change on a change unit by change unit basis, wherein changes are sequentially enumerated and tracked on a per change unit basis.

Applicants respectfully submit that the combination of Peng and Oliver fail to teach or suggest all the claim elements of independent claim 13. For example, claim 1 recites

“receiving said updated state information for said replica and said new changes, applying a conflict resolution policy selected from a plurality of conflict resolution policies, implementing as many changes to the data source as possible with respect to the specified conflict resolution policy and tracking success or failure for each change on a change unit by change unit basis.” As stated in the application, “a synchronization adaptor is a managed code application that accesses WinFS sync services ... and enables synchronization of WinFS data to a non-WinFS data store” (Application at paragraph [0557]) allowing the WinFS system “to synchronize to legacy systems” (Application at paragraph [0516]) by “receiving said updated state information for said replica and said new changes, applying a conflict resolution policy selected from a plurality of conflict resolution policies, implementing as many changes to the data source as possible with respect to the specified conflict resolution policy and tracking success or failure for each change on a change unit by change unit basis.” Peng is directed towards synchronizing objects, however in the event of a conflict the “object container will further call one of the methods defined in an object in order to ... reconcile the received differential update with the differential update(s) of an object which are in conflict.” (Peng, col. 15, lines 49 – 55). More specifically, Peng teaches using a conflict resolution policy that is specified within the object that has the conflict. There is no teaching or suggestion in the combination of Peng and Oliver that teaches synchronization adapters that can select a conflict policy from a plurality of policies when a conflict exists. Accordingly, Applications respectfully request reconsideration of the rejection.

Insomuch as claims 14 and 15 depend from claim 13 they too patentably define over the combination of Peng and Oliver. Accordingly, Applications respectfully request reconsideration of the rejection of claims 14 and 15.

Independent claim 28 recites similar elements to that of claim 13 and patentably defines over the combination of Peng and Oliver for at least the reason described above with respect to claim 13. Accordingly, Applications respectfully request reconsideration of the rejection of claim 28.

Insomuch as claims 28 and 29 depend from claim 28 they too patentably define over the combination of Peng and Oliver. Accordingly, Applications respectfully request reconsideration of the rejection of claims 28 and 29.

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**PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116**

CONCLUSION

Applicants request the Examiner reconsider the rejection and issue a Notice of Allowance of all the claims.

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